Amendments to the Specification

Please replace the paragraph beginning on page 2, line 32, with the following rewritten paragraph:

In order to overcome such a drawback, the detection of discontinuous positions is performed while fast-forwarding the videotape 11 or reproducing the videotape 11 at fast speed. However, this discontinuous position detection raises other problems as described below. Figs. 8A and 8B show a ~~relation~~ relationship between a tape feed speed and a tape head scanning trail of a tape head. As shown in Fig. 8A, when reproducing the videotape 11 at normal speed, a head scan vector 23A that is defined by a tape head rotating speed vector 21A and a tape feed speed vector 22A is on a video track 24, namely, the tape head scans one video track 24. On the other hand, as shown in Fig. 8B, when fast-forwarding the videotape 11 or reproducing the videotape 11 at fast speed, a head scan vector 23B that is defined by a tape head rotating speed vector 21B and a tape feed speed vector 22B is diagonally spread over a plurality of video tracks 24, that is, the tape head scans over the plurality of video tracks 24. It is because the tape head rotating speed is kept constant without being increased, though the tape feed speed is increased. As a result, some of the date and time information and the time code information that should be detected is often skipped, without being detected. Therefore, the actual discontinuous positions of the date and time information will not be detected precisely, while fast-forwarding the videotape 11 and reproducing the videotape 11 at fast speed. The detected discontinuous positions often include some errors. The following problem comes up when cutting the picture material out of the videotape. Fig. 9 schematically shows errors occurred in detecting the discontinuous positions of the date and time information. It is illustrated that actual discontinuous positions AB and BC are mistakenly detected as incorrect discontinuous positions A'B' with detection errors. In a case where the picture material B is cut out of the videotape based on the incorrect discontinuous

positions A'B' and B'C', in reality, a part of the picture material B is cut away, at the same time, a part of the picture material C that is adjacent to the picture material B is mixed into the picture material B.

Please replace the paragraph beginning on page 4, line 24, with the following rewritten paragraph:

~~Accordingly~~ According to other exemplary embodiments of the invention, there ~~are~~is provided a method for detecting an actual discontinuous position between recording contents recorded on a recording medium and a computer-readable medium storing a program for detecting a discontinuous position between recording contents recorded on a recording medium.

Please replace the paragraph beginning on page 4, line 30, with the following rewritten paragraph:

The above and other objects, features and advantages of the invention will become more apparent from the following description of the exemplary embodiments taken in connection with the accompanying drawings in which:

Fig. 1 is a perspective view of a picture editing device according to the invention;

Fig. 2 is a block diagram of the picture editing device of Fig. 1;

Fig. 3 schematically illustrates a concept for detecting a discontinuous position of date and time information according to the invention;

Figs. 4 and 5 are flowcharts for detecting the discontinuous positions of the date and time information according to the invention;

Fig. 6 is a schematic illustration of a memory structure of a videotape;

Fig. 7 is a schematic illustration of the discontinuous positions of the date and time information between picture materials;

Figs. 8A and 8B show ~~a relation~~the relationship between a tape feed speed and a scanning trail of a head; and

Fig. 9 shows errors occurred in detecting the discontinuous positions of the date and time information.

Please replace the paragraph beginning on page 6, line 3, with the following rewritten paragraph:

Fig. 2 is a block diagram of the picture editing device 100. The picture data generating unit 1 comprises a CPU 101, a ROM 102 storing, for example, a BI0S program, a RAM 103 for storing various data temporarily, and a hard disk 104. The hard disk ~~4~~104 stores various programs to be executed by the picture data generating unit 1 to perform various processes, such as a picture material detecting program for detecting and cutting user-selected picture materials and a multimedia optical disk data generating program including a scenario information input program. The above-mentioned components are connected with one another via a bus. The CPU 101 controls the video deck 5 to reproduce, fast-forward and stop the videotape 11, by executing a control program stored in the hard disk 104 with the operation of the keyboard 3 or the mouse 4, and outputting control signals to the video deck 5 via the IEEE1394 interface 8. As mentioned above, the videotape 11 stores, in a sub code area, data and time information indicative of the date and time of recording, and time code information indicative of the tape position used for reproducing and editing. The date and time information, the time code information, and the video data indicative of a still image are input into the picture data generating unit 1 from the video deck 5 via the IEEE1394 interface 8. Herein, the still image corresponds to a frame of an image at a certain position on the videotape 11, and can be displayed on the display 2 to be identified by a user.

Please replace the paragraph beginning on page 6, line 22, with the following rewritten paragraph:

As described above, when scanning the videotape 11 at normal speed in the tape feed direction, the tape head of the video deck 5 scans a video track 24 as indicated by the head scan vector 23A of Fig. 8A. However, when scanning the videotape 11 at the fast speed, the tape head scans the plurality of video tracks 24, as indicated by the head scan vector 23B of Fig. 8B. In addition, as the date and time information and the time code information is read from the video deck 5 via the IEEE1394 interface 8 at a fixed timing, regardless of tape feed speed, the interval between tape positions, at which the date and time information and the time code information is detected, is increased. For these reasons, actual discontinuous positions AB and BC are mistakenly detected as incorrect discontinuous positions A'B' and B'C', respectively, as shown in Fig. 3. Namely, the picture material time code information (a start time code and an end time code of a picture material to be cut) detected in scanning the videotape 11 at fast speed includes some detection errors.

Please replace the paragraph beginning on page 7, line 3, with the following rewritten paragraph:

Fig. 3 schematically shows the concept for detecting discontinuous positions of date and time information according to the invention. As shown in Fig. 3, the picture materials A 16, B 17 and C 18 are recorded on the videotape 11. According to the invention, the videotape 11 is firstly scanned at fast speed in a direction indicated by an arrow ~~X~~ of Fig. 3 from a start to an end of a designated scan area, while detecting incorrect discontinuous positions A'B' and B'C' that includes some detection errors (referred to as temporary discontinuous positions). Next, the videotape 11 is scanned in reverse at fast speed up to peripheries of the detected temporary discontinuous positions A'B' and B'C'. The videotape 11 is then scanned in reverse at normal speed from the peripheries of the temporary discontinuous A'B' and B'C' to detect actual discontinuous positions AB and BC precisely. As the tape head of the video deck 5 scans the video track 24 as indicated by the head scan

vector 23A of Fig. 8A while scanning the videotape at normal speed, the detected actual discontinuous positions AB and BC do not include detection errors. The scan area is optionally designated on time code basis. Although it has been assumed that the videotape 11 is fed and rewound within the designated scan area to detect the discontinuous positions, any specific scan area may not be designated. In such a case, the videotape 11 is fed and rewound from the tape beginning, whose time code is 00:00:00;00, to the tape end.

Please replace the paragraph beginning on page 7, line 27, with the following rewritten paragraph:

In step S1, the CPU 101 controls the video deck 5 to find the start of the designated scan area on the videotape 11. As mentioned above, if ~~any~~ a scan area has not been designated, the CPU 101 controls the video deck 5 to find the tape beginning, whose time code is 00:00:00;00, in step S1. In step S2, the CPU 101 reads the time code information of the tape position found in step S1. Then, the CPU 101 confirms, in step S3, whether the time code information detected in step S2 agrees with the time code information of the start of the designated scan area. If there is no agreement (No in step S3), the CPU 101 continues controlling the video deck 5 to find the start of the designated scan area. If there is agreement (Yes in step S3), the CPU 101 stores the detected time code information as the start time code of the first picture material in the RAM 103 in step S4, while pausing the tape feeding. Next, the CPU 101 controls to the video deck 5 to scan the videotape 11 at fast speed in step S5, and reads the date and time information and the time code information in step S6. The CPU 101 confirms, in step S7, whether there exists the date and time information and the time code information in the scanned area, that is, confirms the presence or absence of the picture material. If there is no information (No in step S7), the CPU 101 moves to the routines of the flowchart of Fig. 5. If there is information (Yes in step S7), the CPU 101 determines whether the detected date and time information is continuous or discontinuous in step S8.

Please replace the paragraph beginning on page 8, line 32, with the following rewritten paragraph:

Then, if the information is discontinuous (No in step S8), for example, the temporary discontinuous position A'B' is detected, the time code of the discontinuous position A'B' is stored in the RAM 103 in step S9. Herein, the temporary discontinuous position A'B' is not an actual discontinuous position AB, but is an incorrect one, because it is detected while scanning the videotape at fast speed. After storing the detected discontinuous position, the CPU 101 goes back to step S6. If ~~there~~ thereafter all information is continuous (Yes in step S8), the CPU 101 determines whether all the designated area is scanned from its start to end in step S10. If the scan has not ended (No in step S10), the CPU 101 repeats steps S6 to S10 until the CPU 101 finishes searching all discontinuous positions within the designated scan area, or until the CPU 101 finds a tape area in which the picture material is interrupted with no date and time information and/or time code information. If the scan has ended (Yes in step S10), the CPU 101 detects the time code of the end of the scan area as the end time code of the last picture materials, and stores it in the RAM 103 in step 11, while pausing the tape feeding.

Please replace the paragraph beginning on page 11, line 28, with the following rewritten paragraph:

The detected time code information that corresponds to the actual discontinuous positions is displayed on ~~of~~ the display 2 to be seen by the user. By using the detected discontinuous position, the picture materials can be cut out of the videotape 11 and edited at the user's discretion. In order to manage the picture materials to be edited and recorded on a multi-media optical disk (such as a DVD), scenario information is generated by inputting the detected time code information into an input form, with titles of the picture materials,

according to the scenario information input program, as incorporated herein by reference to U.S. Patent ~~Application~~ No. ~~09/536,690~~6,721,495 issued April 13, 2004.